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GGT GAG TGG GAG ATT ATT GAC ATT GGT CCA TTC ACT
Gly Gly Trp Glu Ile Ile Asp Ile Gly Pro Phe Thr

CAA AAC TTG GGT AAG TTC GCT GTT GAC GAG GAG AAC
Gln Asn Leu Gly Lys Phe Ala Val Asp Glu Glu Asn

AAG ATT GGT CAA TAC GGT AGA TTG ACT TTC AAC AAG
Lys Ile Gly Gln Tyr Gly Arg Leu Thr Phe Asn Lys

GTT ATT AGA CCA TGT ATG AAG AAG ACT ATT TAC GAG
Val Ile Arg Pro Cys Met Lys Lys Thr Ile Tyr Glu

AAC GAG GGT TCT AGA GAG ATT AAG GGT TAC GAG TAC
Asn Glu Gly Ser Arg Glu Ile Lys Gly Tyr Glu Tyr

CAA TTG TAC GTT TAC GCT TCT GAC AAG TTG TTC CGT
Gln Leu Tyr Val Tyr Ala Ser Asp Lys Leu Phe Arg

GCT GAC ATT TCT GAG GAC TAC AAG ACT CGT GGT CGT
Ala Asp Ile Ser Glu Asp Tyr Lys Thr Arg Gly Arg

AAG TTG TTG AGA TTC AAC GGT CCA GTT CCA CCA CCA
Lys Leu Leu Arg Phe Asn Gly Pro Val Pro Pro Pro

TAA
Stop

FIG.1

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M1

5' AGA ATT CGG TGA GTG GGA GAT TAT TGA CAT TGG TCC ATT
CAC TCA AAA CTT GG 3'

M2

5' GAA CAA GAT TGG TCA ATA CGG TAG ATT GAC TTT CAA CAA
GTT TAT TAG GCC ATG T 3'

M3

5' GAG ACC GAG GGT TCT AGA GAG ATT AAG GGT TAC GAG TAC
CAA TTG TAC GTT TAC GCT TC 3'

M4

5' GTG CTG ACA TTC CTG AGG ACT ACA AGA CTC GTG GTC GTA
AGT TGT TGA GAT TC 3'

N1

5' GTA TTG ACC AAT CTT GTT CTC CTC GTC AAC AGC GAA CTT
ACC CAA GTT TTG AGT GAA TG 3'

N2

5' CTC TAG AAC CCT CGT TCT CGT AAA TAG TCT TCT TCA TAC
ATG GTC TAA TAA CCT TG 3'

N3

5' GTC CTC AGA AAT GTC AGC ACG GAA CAA CTT GTC AGA AGC
GTA AAC GTA CAA TTG

N4

5' AGA ATT CTT ATG GTG GTG GAA CTG GAC CGT TGA ATC TCA
ACA ACT TAC GAC 3'

FIG. 2

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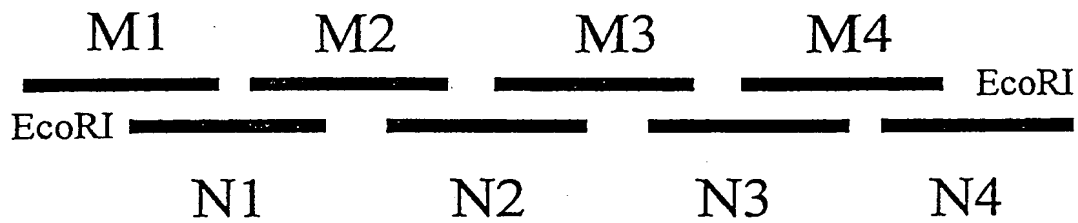
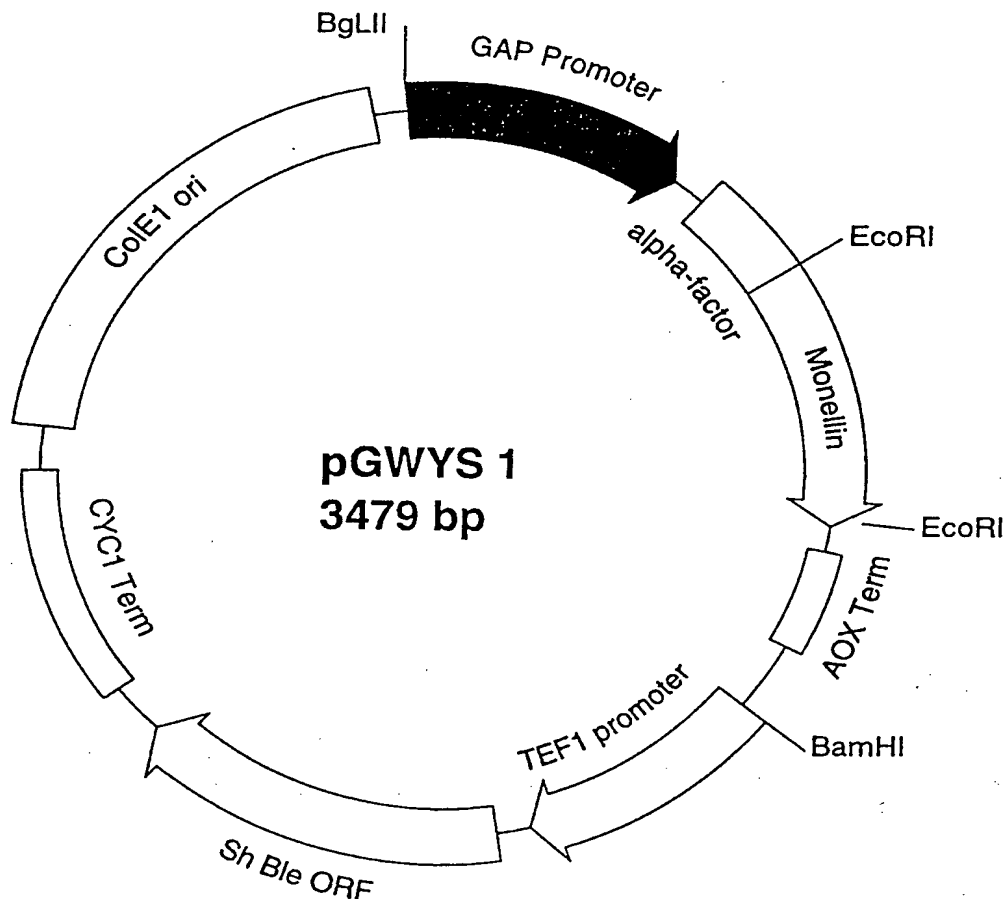


FIG. 3

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**Comments for pGWYS1 (3479 bp)**

GAP Promoter region: 1 -483
 Alpha-factor signal sequence: 493-760
 Monellin coding region: 762-1059
 3' AOX 1 termination region: 1060-1306
 TEF1 Promoter region: 1307-1709
 EM7 Promoter region: 1710-1781
 Sh ble ORF: 1782-2518
 CYC1 termination region: 2159 2477
 ColE1 origin (pUC-derived): 2478-3479

FIG. 4

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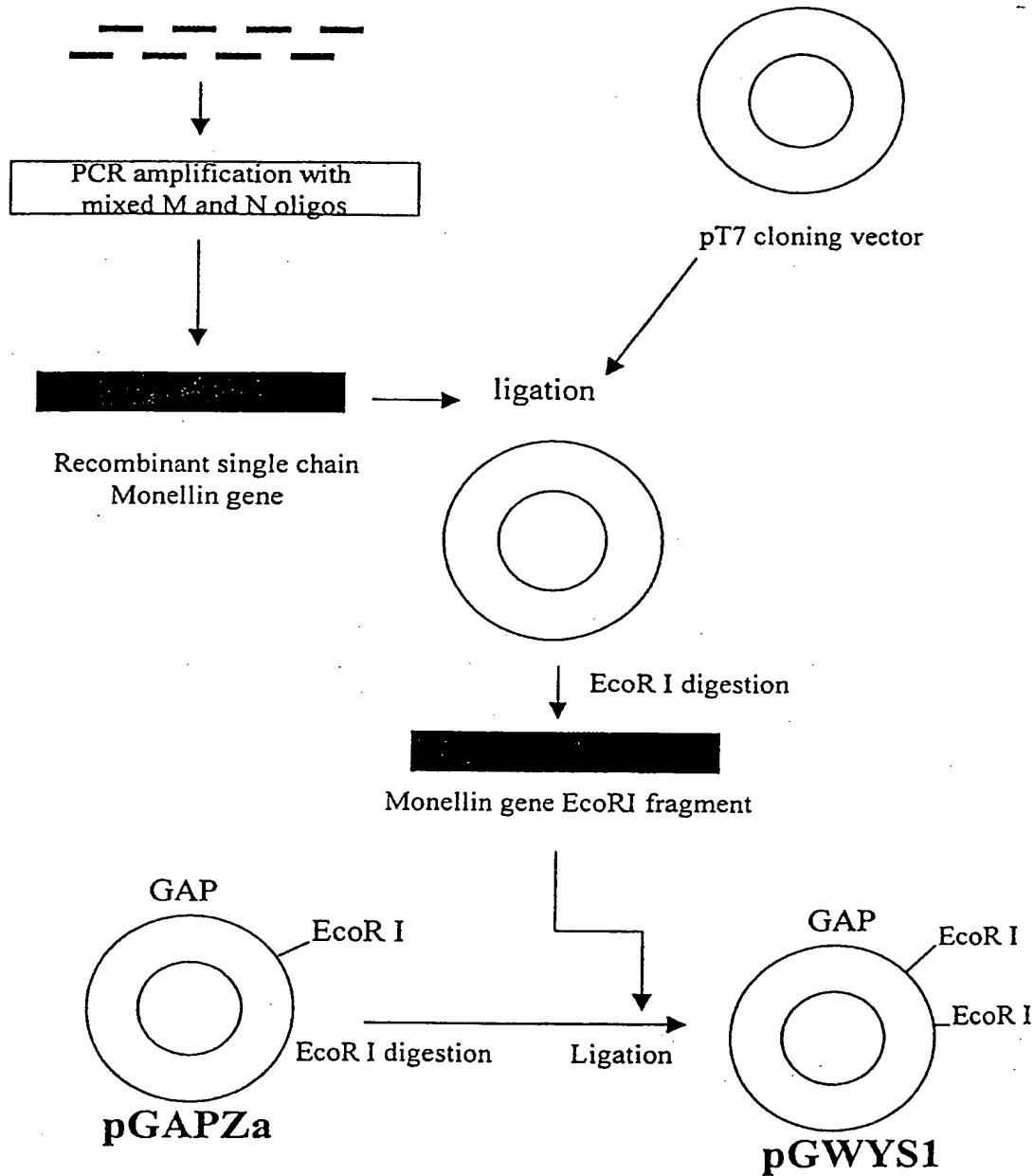


FIG. 5

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Lane 1. Protein MW Marker

Lane 2. 5ul Culture Medium

Lane 3. Partially Purified Recombinant
Single Chain Monellin

Lane 4. 40ug Native Monellin

FIG.6

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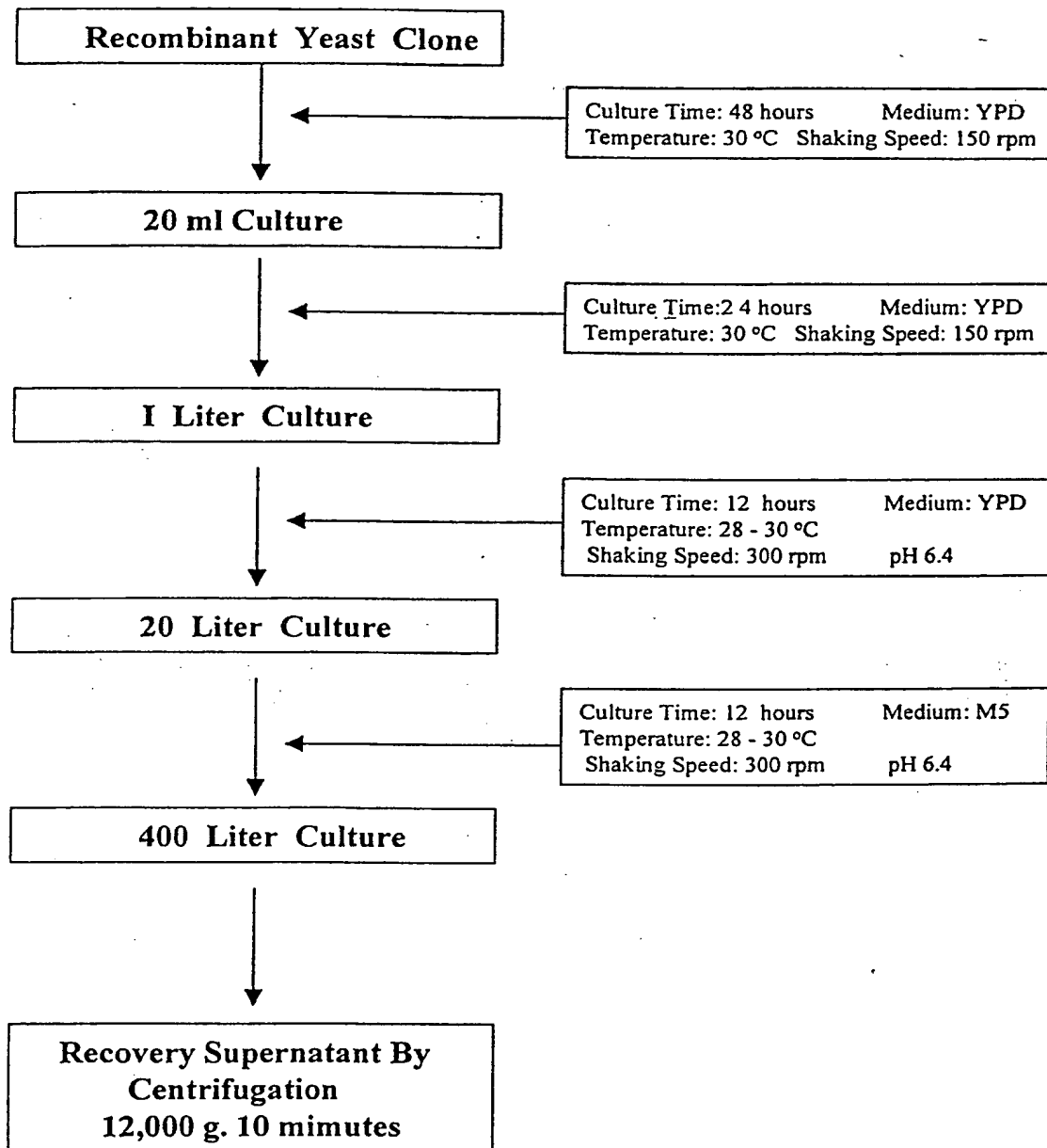


FIG. 7a

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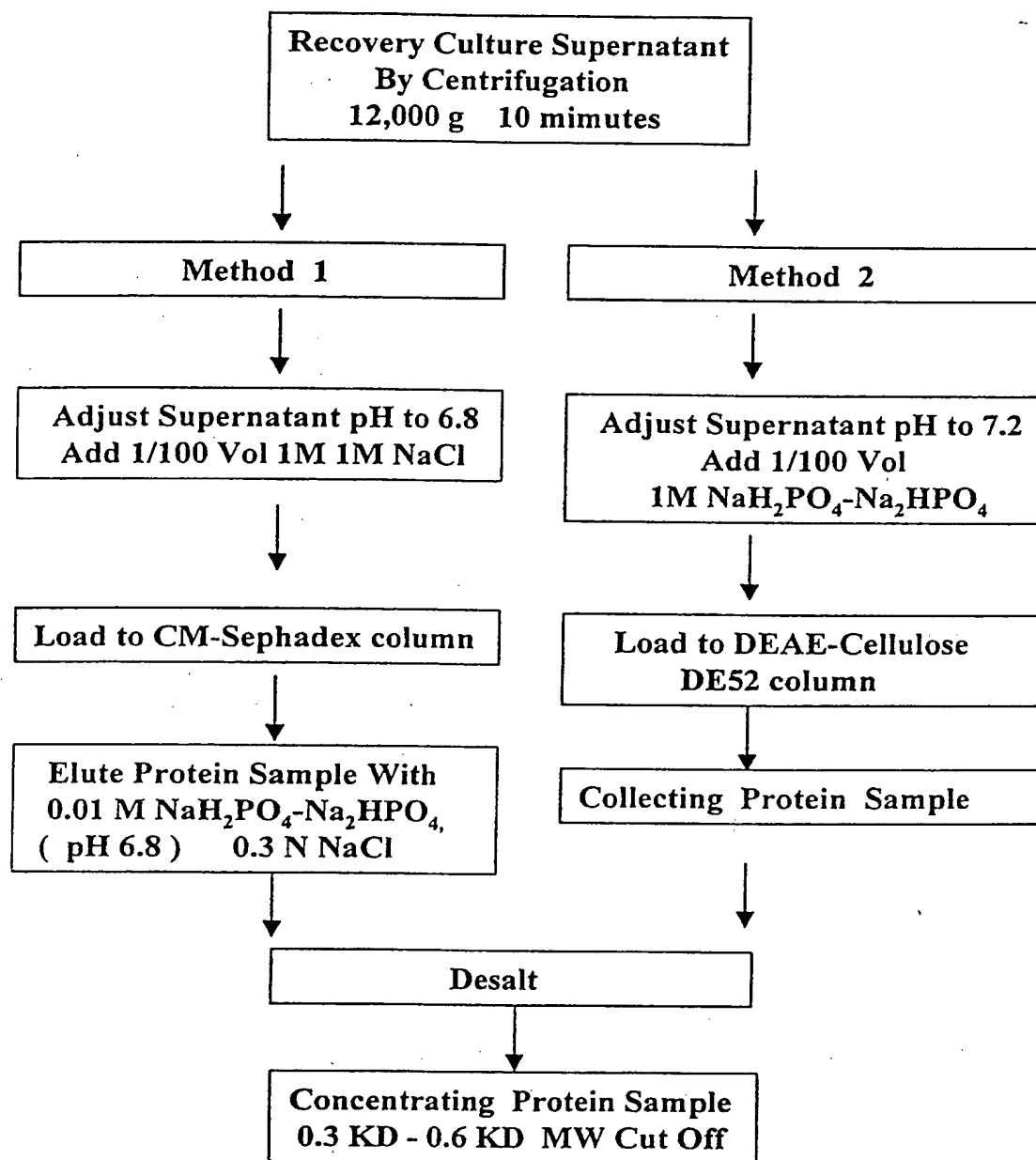


FIG. 7b